

**REMARKS**

Please reconsider this application in view of the above amendments and the following remarks. Applicant thanks the Examiner for carefully considering this application.

**Disposition of Claims**

Claims 1 – 7 were pending in the present application. By way of this reply, claims 8 – 10 have been added. Accordingly, claims 1 – 10 are now pending. Claims 1, 2, 8, 9 and 10 are independent. Claim 6 depend, either directly or indirectly, from independent claim 1. Claims 3, 4, 5, and 7 depend, either directly or indirectly, from independent claim 2.

**Amendments to the Specification**

Applicant has amended the title by way of this reply such that it now reads as “RADIO VIDEO TRANSMISSION DEVICE, RADIO VIDEO RECEPTION DEVICE, RADIO VIDEO TRANSMISSION/RECEPTION SYSTEM, SIGNAL GENERATION DEVICE, SIGNAL DECODING DEVICE, SIGNAL GENERATION/DECODING DEVICE, VIDEO TRANSMISSION DEVICE, VIDEO RECEPTION DEVICE, AND VIDEO TRANSMISSION/RECEPTION SYSTEM.” Applicant believes that the new title is clearly indicative of the invention to which the claims are directed.

**Double Patenting**

As stated in the previous responses, claims 1 and 2 stand provisionally rejected on the ground of non-statutory obviousness-type double patenting as being unpatentable over co-pending U.S. Patent Application Serial No. 10/583,532. As this rejection is provisional, Applicants substantive response is deferred at this time.

**Rejections under 35 U.S.C. § 103****Claims 1 – 2**

Claims 1 – 2 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 7,010,032 (“Kikuchi”) in view of U.S. Patent No. 6,037,932 (“Feinleib”) and U.S. Patent No. 5,543,852 (“Yuen”). For the following reasons, this rejection is respectfully traversed.

MPEP § 2143 states that “[t]he key to supporting any rejection under 35 U.S.C. 103 is the clear articulation of the reason(s) why the claimed invention would have been obvious. The Supreme Court in KSR noted that the analysis supporting a rejection under 35 U.S.C. 103 should be made explicit.” Further, when combining prior art elements, the Examiner “must articulate the following: (1) a finding that the prior art included each element claimed, although not necessarily in a single prior art reference, with the only difference between the claimed invention and the prior art being the lack of actual combination of the elements in a single prior art reference....” MPEP § 2143(A).

Referring to the specification for purposes of illustration only, one or more embodiments of the present invention includes, “a video signal which is encoded in units of a video signal corresponding to a predetermined number of vertical periods will be referred to as an encoded frame.” *See* paragraph [0018] of the published specification. The specification also recites, in part that the “radio video transmission device sets a transmission interval of the header data of the encoded frame to a predetermined number of vertical periods.” *See* paragraph [0019] of the published specification. Further, the specification recites, in part, that the “radio video transmission device adds to a header portion of the encoded frame a flag indicative of the header portion of the encoded frame.” *See* paragraph [0019] of the published specification.

Accordingly, independent claim 1 recites, in part, “encoding is performed in units of a video signal corresponding to a predetermined number of vertical periods, time intervals at which data of a header of the encoded video signal corresponding to the predetermined number of vertical periods is transmitted conform to the predetermined number of vertical periods, and during transmission of the header data of the video signal corresponding to the predetermined number of vertical periods, information indicative of the header data is multiplexed and transmitted.” Independent claim 2 recites substantially similar limitations.

Kikuchi fails to disclose or render obvious each and every element of independent claim 1. The Examiner admits that Kikuchi explicitly fails to disclose or otherwise render obvious, at least, encoding being performed “in units of a video signal corresponding to a predetermined number of vertical periods, time intervals at which data of a header of the encoded video signal corresponding to the predetermined number of vertical periods is transmitted conform to the predetermined number of vertical periods.” *See* OA at page 3. Specifically, Kikuchi is directed towards “a moving image coding apparatus and a moving image decoding apparatus for suppressing the adverse effect of an RTP packet loss when a moving image signal is coded and is transmitted using RTP packet and simplifying processing.” *See* column 2, lines 49 – 54, of Kikuchi. A person of ordinary skill in the art will appreciate that RTP suppression is not equivalent to the above quoted limitation, as was correctly indicated by the Examiner.

Feinleib fails to supply what Kikuchi lacks. However, the Examiner asserts that, even though Kikuchi fails to disclose or otherwise render obvious “encoding is performed in units of a video signal corresponding to a predetermined number of vertical periods, time

intervals at which data of a header of the encoded video signal corresponding to the predetermined number of vertical periods is transmitted conform to the predetermined number of vertical periods, and the header data of the video signal corresponding to the predetermined number of vertical periods is transmitted,” as claimed, that the limitations recited in claims 1 and 2 of the present application are disclosed in Feinleib, which the Examiner believes describes some of the claimed features which Kikuchi lacks.

Specifically, in contrast with the claimed invention, Feinleib describes that the transmitted video signals are configured by video data and Video Blanking Interval (VBI) data and that the VBI data is configured as conventional VBI-compatible data packets of 33 bytes. *See Figures 4 and 5, and column 3, lines 7 – 15, column 4, lines 48 – 53, column 5, lines 50 – 60, and column 6, lines 18 – 37.* The VBI indicates the top 21 lines in a television frame which are usually not displayed. Feinleib further describes that the data contained in a data block **130** and **140**, including an IP/UDP packet, is divided and transmitted in two or more VBI-compatible data packets **20**. A person of ordinary skill in the art will appreciate that the VBI data and associated packets are not equivalent to the claimed association of elements with the predetermined number of vertical periods.

Specifically, Feinleib fails to disclose or otherwise render obvious at least a configuration in which encoding is performed in units of a video signal corresponding to a predetermined number of vertical periods. In the configuration disclosed in Feinleib, data included in one data block **130, 140** is merely divided into a plurality of VBI-compatible data packets **20**. Further, Feinleib fails to disclose a configuration in which time intervals at which data of a header of the encoded video signal corresponding to the predetermined number of vertical periods is transmitted conform to the predetermined number of vertical periods, and the

header data of the video signal corresponding to the predetermined number of vertical periods is transmitted.

Furthermore, the VBI-compatible data packets are used to include additional data other than the video signals, such as stock price and weather information. *See* column 1 of Feinleib. Such a VBI-compatible data packet does not correspond with the claimed “video signal corresponding to a predetermined number of vertical periods” described in claim 1.

Further, Feinleib discloses that the VBI-compatible data packets are small in size, specifically, 33 bytes. In contrast, in the claimed invention, the “units of a video signal corresponding to a predetermined number of vertical periods” which a person of ordinary skill in the art will appreciate indicates a larger size than the 33 byte data of Feinleib, for example, a unit of four fields as disclosed in the present application. *See* paragraphs [0018], [0019], and [0022] of the published specification. Therefore, the “video signal corresponding to a predetermined number of vertical periods,” as claimed, cannot fit in the disclosed VBI-compatible data packets of Feinleib and are, therefore, non-equivalent elements.

Yuen fails to supply what Kikuchi and Feinleib lacks. Yuen is directed towards, “television closed captioning for the hearing impaired and in particular to methods and apparatus for avoiding loss of closed caption data when using extended data services.” *See* column 1, lines 15 -18, of Yuen. A person of ordinary skill in the art will appreciate that the disclosure of Yuen is not related to, nor discloses or otherwise render obvious, the claimed invention. Specifically, Yuen’s closed captioning loss prevention is not equivalent to, at least, the encoding and header based on a predetermined number of vertical periods. Accordingly, Yuen does not remedy the failure of Kikuchi and Feinleib to show or suggest each and every element of independent claim 1.

Additionally, one of ordinary skill, using common sense as a guide, would not turn to the combination of cited references to teach the claimed invention. This is because common sense would dictate that a combination of Kikuchi, Feinleib, and Yuen would, at most, provide an RTP suppressing (Kikuchi) data repackaging (Feinleib) system which avoids the loss of closed caption data (Yuen). Further, one of ordinary skill would not look to combine Kikuchi, which teaches negative effect suppression, with Feinleib, which teaches signal repacking, with Yuen, which teaches close caption data loss avoidance. Accordingly, the combination of references cited by the Examiner fails to render obvious each and every element of independent claims 1 and 2 and is also an inappropriate combination of unrelated teachings.

In view of the above, the cited prior art references, whether considered separately or combined, do not support an obviousness rejection of independent claim 1. Likewise, the cited prior art references, whether considered separately or combined, do not support an obviousness rejection of independent claim 2, which contains limitations similar to those of claim 1. Accordingly, withdrawal of this rejection is respectfully requested.

Claims 4 and 7

Claims 4 and 7 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Kikuchi, Feinleib, Yuen and U.S. Patent No. 5,781,599 (“Shiga”). For the following reasons, this rejection is respectfully traversed.

As discussed above, Kikuchi, Feinleib, and Yuen fail to disclose or otherwise render obvious at least the aforementioned limitations recited in the independent claims 1 and 2. Shiga fails to supply what Kikuchi, Feinleib, and Yuen lack. Shiga is directed towards “a device for receiving and reproducing a packet having a multiplexed transport stream of MPEG by using a communication control bus which is based on IEEE-1394.” *See* column 1, lines 5 – 9, of

Shiga. However, Shiga does not disclose, at least, the encoding and header based on a predetermined number of vertical periods as claimed. Accordingly, Shiga does not remedy the failure of Kikuchi, Feinleib, and Yuen to teach or suggest each and every element of independent claim 1.

Additionally, one of ordinary skill, using common sense as a guide, would not turn to the combination of cited references to teach the claimed invention. This is because common sense would dictate that a combination of Kikuchi, Feinleib, Yuen, and Shiga would, at best, provide an RTP avoiding, data repackaging, closed captioning saving, receiver and reproducer. Accordingly, the combination of references cited by the Examiner fails to render obvious each and every element of independent claim 2 and is also an inappropriate combination of unrelated teachings.

In view of the above, the cited prior art references, whether considered separately or combined, do not support an obviousness rejection of independent claim 2. Further, the cited prior art references, whether considered separately or in combination, also do not support an obviousness rejection of claims 4 and 7 which depend, either directly or indirectly, from independent claim 2. Accordingly, withdrawal of this rejection is respectfully requested.

Claims 3 and 5 – 6

Claims 3 and 5 – 6 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Kikuchi, Feinleib, Yuen, in further view of Shiga and U.S. Patent No. 6,310,922 (“Canfield”). For the following reasons, this rejection is respectfully traversed.

As discussed above, Kikuchi, Feinleib, Yuen, and Shiga fail to disclose or otherwise render obvious at least the aforementioned limitations recited in the claims. Canfield

fails to supply what Kikuchi, Feinleib, Yuen, and Shiga lack. Canfield is directed towards “generating variable rate synchronization signals.” *See* the title of Canfield. Specifically, “synchronizing signals having different frequencies, a particular example of which provides different frame synchronization rates for display of the different modes of video.” *See* column 1, lines 5 – 10 of Canfield. However, Canfield does not disclose, at least, the encoding and header based on a predetermined number of vertical periods, as claimed. Accordingly, Canfield does not remedy the failure of Kikuchi, Feinleib, Yuen, and Shiga to teach or suggest each and every element of independent claim 1.

Additionally, one of ordinary skill, using common sense as a guide, would not turn to the combination of cited references to teach the claimed invention. This is because common sense would dictate that a combination of Kikuchi, Feinleib, Yuen, Shiga, and Canfield would, at best, provide RTP avoiding, data repackaging, closed captioning saving, receiver and reproducer which implements variable synchronization signals. Accordingly, the combination of references cited by the Examiner fails to render obvious each and every element of independent claim 1 and is also an inappropriate combination of unrelated teachings.

In view of the above, the cited prior art references, whether considered separately or combined, do not support an obviousness rejection of independent claim 1. Likewise, the cited prior art references, whether considered separately or combined, do not support an obviousness rejection of independent claim 2, which contains limitations similar to those of claim 1. Further, the cited prior art references, whether considered separately or in combination, also do not support an obviousness rejection of claims 3 and 5 as well as claim 6 which depend, either directly or indirectly, from independent claim 2 and 1, respectively. Accordingly, withdrawal of this rejection is respectfully requested.

**New Claims**

By way of this reply, claims 8, 9, and 10 are added. Applicants respectfully assert that no new matter is added by way of new claims 8, 9, and 10, as support for new claims 8, 9, and 10 may be found, for example, in at least the originally-filed claims and corresponding paragraphs of the published specification.

Specifically, the subject matter contained within new independent claims 8 and 9 substantially corresponds to the subject matter contained within pending claims 1 and 3, respectively. New Claim 10 has been drafted by combining the subject matter from new claims 8 and 9.

Additionally, new claim 9 recites, in part, that the video reception device “comprises a phase comparison section..., a voltage controlled oscillator..., and a timing generation section... .” and also has a varied scope as compared to claim 3 because it does not depend from the signal generation device. Support for the limitations may be found, for example, in at least paragraphs [0022] and [0030] of the published specification.

Further new claims 8 and 10 recite, in part, that “encoding is performed in units of a video signal corresponding to a predetermined number of vertical periods, time intervals at which data of a header of the encoded video signal corresponding to the predetermined number of vertical periods is transmitted conform to the predetermined number of vertical periods, and the header data of the video signal corresponding to the predetermined number of vertical periods is transmitted.” Support for the limitations may be found, for example, in at least Figures 2 and 3 and paragraphs [0010], [0018], [0019], and [0032] of the published specification.

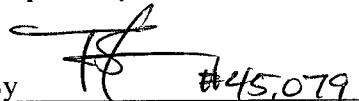
As discussed above, all cited references, whether separately or combined, do not support an obviousness rejection of independent claims 1 and 2. Due to the similarity of the limitations of the new claims stated above to those contrasted with the cited art above with respect to already pending claims, whether considered separately or in combination, independent claims 8 – 10 are patentable over all of the cited art.

### Conclusion

Applicant believes this reply is fully responsive to all outstanding issues and places this application in condition for allowance. If this belief is incorrect, or other issues arise, the Examiner is encouraged to contact the undersigned or his associates at the telephone number listed below. Please apply any charges not covered, or any credits, to Deposit Account 50-0591 (Reference Number 08228/095001).

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Respectfully submitted,

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